

# MONTANA SAGE GROUSE OVERSIGHT TEAM AGENDA ITEM BRIEF SHEET

DATE: MAY 27, 2022

## AGENDA ITEM: RULE MAKING CHANGE FOR HQT TECHNICAL MANUAL

### ACTION NEEDED: EXECUTIVE ACTION TO APPROVE THE PROPOSED EDITS TO THE HQT TECHNICAL MANUAL

#### SUMMARY:

The Sage Grouse Program detected a technical error in the HQT Technical Manual that affects the computations necessary for updating the HQT Basemap. The HQT Basemap currently in use (v1.0 2018) was developed based on an extensive and rigorous stakeholder process during 2017 and pre-dates the publication of the HQT Technical Manual (October 2019).

Specifically, the error concerns the mathematical incorporation of the Unsuitable Lands designations within the HQT Basemap. The stakeholder process and subsequent 2018 HQT Basemap incorporates Unsuitable Lands through multiplication with Anthropogenic variables. However, the HQT Technical Manual incorporates Unsuitable Lands through averaging with Habitat and Population variables. This difference has major implications on the assessment of impacts for proposed projects within designated sage-grouse habitat as averaging results in higher base values, and thus, higher impacts assessed for development projects.

#### DETAILS:

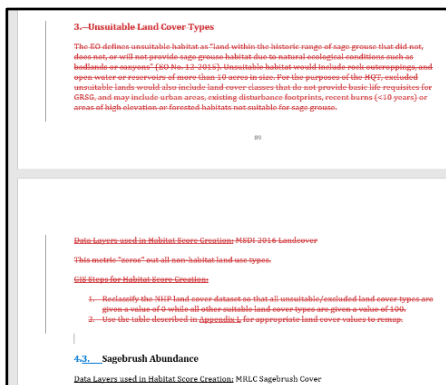
The HQT Basemap is composed of many GIS pixels that each contain a value ranging from 0 to 1. When multiplication is applied to values <1, the resulting value is overall lower due to the power of multiplication (e.g., any number multiplied by zero = zero). When averaging is applied, the resulting value reflects the central tendency of the numbers averaged. Overall, if Unsuitable Lands is included through averaging, those areas will result in a value >0. But, if Unsuitable Lands is included through multiplication, those areas will remain 0 in the HQT Basemap, thereby not contributing to impacts.

#### PROGRAM RECOMMENDATION:

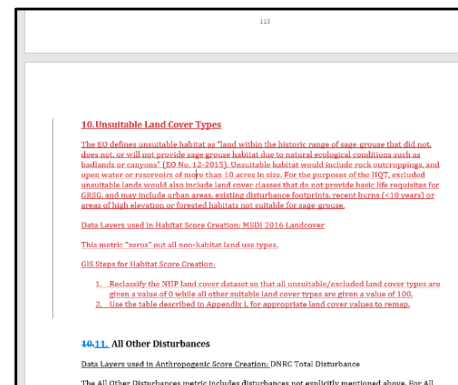
The Sage Grouse Program proposes to change the HQT Technical Manual to reflect the stakeholder intent of incorporating Unsuitable Lands with the Anthropogenic variables. The Sage Grouse Program recommends addressing this correction now in order to provide an updated and accurate HQT Basemap for Montana citizens. By implementing this correction, the Sage Grouse Program would:

1. Provide a consistent approach for updating the HQT Basemap,
2. Follow the recommendations provided by the original stakeholder process, and
3. Avoid the perpetuation of errors.

The correction of this technical error is considered a major change and thus requires rule-making. The Sage Grouse Program is also taking the opportunity to rectify grammatical errors and typos (considered minor changes not requiring rule-making) found within the HQT Technical Manual.



Within Appendix A,  
remove Unsuitable Land  
Cover Types from the  
Population and Habitat  
Variables section on page  
89 and add Unsuitable  
Land Cover Types to the  
Anthropogenic Variables  
section on page 114.



MONTANA SAGE GROUSE  
Habitat Conservation Program